"Electronic Structure of Novel Graphite Intercalated Superconductors"

Abstract:

"I will report the study of the architecture of the electronic states of graphite compounds intercalated with metal ions and its relation to the superconductivity that has been discovered recently in C6Yb (Tc=6.5K) and C6Ca (Tc=11.5K). The intriguing feature of these compounds is the so-called interlayer state of graphite whose population by electrons appears to be essential for the materials to superconduct. Possible mechanisms of superconductivity will be discussed in this context."